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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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FOLEY AND LARDNER LLP
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WASHINGTON, DC 20007

EXAMINER

MAYO, TARA L

ART UNIT	PAPER NUMBER
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3671

MAIL DATE	DELIVERY MODE
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05/16/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,991	Applicant(s) LOSET ET AL.	
	Examiner Tara L. Mayo	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>20050321</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

3. The abstract of the disclosure is objected to because it includes language that can be implied and legal phraseology.

On line 1, delete "The invention relates to a" and insert therefor --A--. Repeat the correction on the second to last line of the Abstract.

Delete "means" throughout the Abstract and insert therefor alternative language.

Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 1 through 29 are objected to because of the following informalities: minor grammatical errors.

In each claim 1 through 29, correct the preamble. For example, amend claim 1 to read "A protective system..." and claim 2 to read, "The protection system according to claim 1..."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1 through 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 1, the scope of the claimed invention is rendered indefinite by the positive recitations of an installation and a protective structure. Specifically, Applicant inconsistent use of terminology for the same feature of the claimed invention renders the scope unclear. For the purpose of prosecution on the merits, the Examiner has considered the terms synonymous for one another as they refer to the same feature.

With regard to claim 2, the scope of the claimed invention is rendered indefinite by the recitation of "preferably" on line 3. Specifically, it is unclear if the limitations which follow the term are encompassed by the scope of the claimed invention. For the purpose of prosecution on

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the merits, the Examiner has considered the scope of the claimed invention to include the limitation of the protection means being suspended from the turret buoy by a plurality of chains or wires. Claim 3 is similarly rejected and interpreted.

Regarding claim 3, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

The term "more or less flush" in claim 5 is a relative term which renders the claim indefinite. The term "more or less flush" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. For the purpose of prosecution on the merits, the Examiner has interpreted the phrase to mean --substantially flush--.

Claim 9 recites the limitation "the cell" on line 2. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

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claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1 through 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giannesini (U.S. Patent No. 5,354,152) in view of Travis (U.S. Patent No. 4,844,213).

Giannesini '151, as best seen in Figures 1, 3A, 3B and 5, shows a loading system for transferring hydrocarbons between an installation (3) on the seabed and a floating vessel in areas exposed to ice (30) comprising:

- a submerged turret (1) loading arrangement including a loading/unloading buoy;
- a flexible riser (5) extending from the seabed installation to the buoy; and
- a plurality of mooring lines (2) connected to the buoy and extending outward therefrom;

wherein the seabed installation is a protective structure containing means (4) for storing the riser in a protected position when disconnected and retracted from the floating vessel.

Giannesini '151 fails to teach protective means for protecting the riser from impacts when the riser is in an extended, load-transferring mode.

Travis '213, as best seen in Figure 1, claims protective means in the form of an energy absorption system comprising a plurality of truncated conical elements (12) suspended from wires (18), the conical elements having a smaller upper diameter and a larger lower diameter.

It would have been obvious to one having ordinary skill in the art at the time of invention to modify the device disclosed by Giannesini '151 such that it would further include the protective means shown by Travis '213. The motivation would have been to provide the flexible riser with an energy absorption system capable of preventing damage to the riser by floating ice.

With specific regard to claims 7 and 8, it would have been obvious to one having ordinary skill in the art at the time of invention to modify the device disclosed by the combination of Giannesini '151 and Travis '213 such that the protective structure would further comprise a reel with a horizontal axis since the Examiner takes Official Notice of the use of reels for storing lengths of conduit. The reel would be positioned with its axis in the horizontal direction for ease of collection and removal of the riser.

With regard to claim 8, it would have been obvious to one having ordinary skill in the art of marine structures at the time of invention to modify the device disclosed by the combination of Giannesini '151 and Travis '213 such that the riser would be connected to a supply line by means of a swivel since the Examiner takes Official Notice of the use of swivels in flow line connections for reducing torsional and bending forces in the same.

With regard to claims 20 through 29, the method steps recited therein are inherent to the use of the device taught by the combination of Giannesini '151 and Travis '213.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tara L. Mayo whose telephone number is 571-272-6992. The examiner can normally be reached on Monday through Friday 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TARA L MAYO
PRIMARY EXAMINER
Art Unit 3671

tlm

11 May 2007